CLAIMS

1   1.   A method for processing data comprising:
2   receiving as inputs a plurality of records, each
3   record comprising respective entries in a first field and
4   in a second field;
5   processing at least some of the records so as to
6   find a relation between the entries in the first and
7   second fields in the at least some of the records;
8   selecting for verification one of the records
9   comprising first and second entries in the first and
10   second fields, respectively; and
11   comparing the first and second entries to the
12   relation in order to verify the first and second entries.

1   2.   A method according to claim 1, wherein processing
2   the at least some of the records comprises processing
3   alphanumeric characters, and wherein the relation
4   comprises a semantic relationship between words formed by
5   the characters.

1   3.   A method according to claim 1, wherein processing
2   the at least some of the records comprises plotting
3   points corresponding to the entries in a multidimensional
4   space, and finding a geometrical relationship between the
5   points in the space.

1   4.   A method according to claim 3, wherein finding the
2   geometrical relationship comprises fitting one or more
3   lines to at least a portion of the entries.

1   5.   A method according to claim 4, wherein comparing the
2   first and second entries comprises plotting an entry

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3 point in the multidimensional space corresponding to the
4 first and second entries, and verifying the entries
5 responsive to a proximity of the entry point to one of
6 the lines.

1 6.   A method according to claim 1, wherein processing
2 the at least some of the records comprises finding a
3 mathematical relationship between the entries in the
4 first and second fields.

1 7.   A method according to claim 1, wherein processing
2 the at least some of the records further comprises
3 assigning a confidence level to the relation, and wherein
4 comparing the entries comprises verifying the entries
5 responsive to the confidence level.

1 8.   A method according to claim 7, wherein assigning the
2 confidence level to the relation comprises assigning the
3 confidence level responsive to a quantity of the at least
4 some of the records that satisfy the relation.

1 9.   A method according to claim 1, wherein comparing the
2 first and second entries to the relation comprises
3 assigning a confidence level to the verification of the
4 selected record responsive to a fit of the first and
5 second entries to the relation.

1 10. A method according to claim 1, wherein comparing the
2 first and second entries comprises correcting one or more
3 of the first and second entries so as to accord with the
4 relation.

1 11. A method according to claim 1, wherein processing
2 the at least some of the records comprises finding

3   alternative first and second relations between the

4   entries in the first and second fields, and wherein

5   comparing the first and second entries comprises

6   verifying the entries if they accord with either of the

7   first and second relations.

1   12. A method according to claim 1, wherein receiving the

2   plurality of records comprises receiving entries that

3   have been coded by optical character recognition (OCR),

4   and wherein comparing the first and second entries

5   comprises verifying that the OCR has correctly coded the

6   entries.

1   13. Data processing apparatus comprising:

2   a memory arranged to store a plurality of records,

3   each record comprising respective entries in a first

4   field and in a second field; and

5   a processor arranged to read and process at least

6   some of the records so as to find a relation between the

7   entries in the first and second fields in at least some

8   of the records, and further arranged to select for

9   verification one of the records, which comprises first

10   and second entries in the first and second fields

11   respectively, and to compare the first and second entries

12   to the relation in order to verify the first and second

13   entries.

1   14. Apparatus according to claim 13, wherein the

2   processor is arranged to read and process alphanumeric

3   characters, and wherein the relation comprises a semantic

4   relationship between words formed by the characters.

15. Apparatus according to claim 13, wherein the processor is further arranged to plot points corresponding to the entries in a multidimensional space, and wherein the relation comprises a geometrical relationship between the points in the space.

16. Apparatus according to claim 15, wherein the processor is arranged to find the geometrical relationship by fitting one or more lines to at least a portion of the entries.

17. Apparatus according to claim 16, wherein the processor is further arranged to verify the entries responsive to a proximity of the entry point to one of the lines.

18. Apparatus according to claim 13, wherein the relation comprises a mathematical relationship between the entries in the first and second fields.

19. Apparatus according to claim 13, wherein the processor is also arranged to assign a confidence level to the relation, and to verify the entries responsive to the confidence level.

20. Apparatus according to claim 19, wherein the processor is arranged to assign the confidence level responsive to a quantity of the at least some of the records that satisfy the relation.

21. Apparatus according to claim 13, wherein the processor is further arranged to assign a confidence level to the verification of the selected record responsive to a fit of the first and second entries to

5   the relation.

1   22. Apparatus according to claim 13, wherein the
2   processor is further arranged to correct one or more of
3   the first and second entries so as to accord with the
4   relation.

1   23. Apparatus according to claim 13, wherein the
2   processor is arranged to find alternative first and
3   second relations between the entries in the first and
4   second fields, and to verify the first and second entries
5   if they accord with either of the first and second
6   relations.

1   24. Apparatus according to claim 13, wherein the entries
2   comprise entries that have been coded by optical
3   character recognition (OCR), and wherein the processor is
4   arranged to verify that the OCR has correctly coded the
5   entries

1   25. A computer software product for processing data, the
2   product comprising a computer-readable medium in which
3   program instructions are stored, which instructions, when
4   read by a computer, cause the computer to:
5   receive as inputs a plurality of records, each
6   record comprising respective entries in a first field and
7   in a second field;
8   process at least some of the records so as to find a
9   relation between the entries in the first and second
10 fields in the at least some of the records;
11   select for verification one of the records
12 comprising first and second entries in the first and
13 second fields, respectively; and

14 compare the first and second entries to the relation
15 in order to verify the first and second entries.

1   26. A product according to claim 25, wherein the
2   instructions cause the computer to process alphanumeric
3   characters, and wherein the relation comprises a semantic
4   relationship between words formed by the characters.

1   27. A product according to claim 25, wherein the
2   instructions cause the computer to plot points
3   corresponding to the entries in a multidimensional space,
4   and to find a geometrical relationship between the points
5   in the space.

1   28. A product according to claim 27, wherein the
2   instructions cause the computer to fit one or more lines
3   to at least a portion of the entries.

1   29. A product according to claim 28, wherein the
2   instructions cause the computer to plot an entry point in
3   the multidimensional space corresponding to the first and
4   second entries, and to verify the entries responsive to a
5   proximity of the entry point to one of the lines.

1   30. A product according to claim 25, wherein the
2   instructions cause the computer to find a mathematical
3   relationship between the entries in the first and second
4   fields.

1   31. A product according to claim 25, wherein the
2   instructions cause the computer to assign a confidence
3   level to the relation, and to compare the entries so as
4   to verify the entries responsive to the confidence level.

1   32. A product according to claim 31, wherein the

2 instructions cause the computer to assign the confidence

3 level responsive to a quantity of the at least some of

4 the records that satisfy the relation.

1 33.   A   product   according   to   claim   25,   wherein   the

2 instructions cause the computer to assign a confidence

3 level   to   the   verification   of   the   selected   record

4 responsive to a fit of the first and second entries to

5 the relation.

1 34.   A   product   according   to   claim   25,   wherein   the

2 instructions cause the computer to correct one or more of

3 the   first   and   second   entries   so   as   to   accord   with   the

4 relation.

1 35.   A   product   according   to   claim   25,   wherein   the

2 instructions cause the computer to find alternative first

3 and second relations between the entries in the first and

4 second fields, and to verify the entries if they accord

5 with either of the first and second relations.

1 36.   A   product   according   to   claim   25,   wherein   the

2 instructions cause the computer to receive entries that

3 have been coded by optical character recognition (OCR),

4 and   to   verify   that   the   OCR   has   correctly   coded   the

5 entries.